### DESCRIPTION

**Species Reactivity**  
Human

**Specificity**  
Detects human IL-2 in direct ELISAs. Does not cross-react with recombinant IL-2 from mouse, rat, pig, or cotton rat.

**Source**  
Monoclonal Mouse IgG, Clone # 5334

**Purification**  
Protein A or G purified from hybridoma culture supernatant

**Immunogen**  
*E. coli*-derived recombinant human IL-2  
A1a21-Thr153  
Accession # NP_000577

**Endotoxin Level**  
<0.10 EU per 1 μg of the antibody by the LAL method.

**Formulation**  
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Technique</th>
<th>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunocytochemistry</td>
<td>8-25 μg/mL</td>
<td>See Below</td>
</tr>
<tr>
<td>Intracellular Staining by Flow Cytometry</td>
<td>2.5 μg/10⁶ cells</td>
<td>Human peripheral blood mononuclear cells treated with PMA and Ca²⁺ ionomycin, fixed with paraformaldehyde, and permeabilized with saponin</td>
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<tr>
<td>CyTOF-ready</td>
<td></td>
<td>Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.</td>
</tr>
<tr>
<td>Neutralization</td>
<td></td>
<td>Measured by its ability to neutralize IL-2-induced proliferation in the CTLL-2 mouse cytotoxic T cell line. Gearing, A.J.H. and C.B. Bird (1987) in Lymphokines and Interferons, A Practical Approach. Clemens, M.J. et al. (eds): IRL Press. 276. The Neutralization Dose (ND₅₀) is typically 0.015-0.03 μg/mL in the presence of 2 ng/mL Recombinant Human IL-2.</td>
</tr>
</tbody>
</table>

### DATA

**Neutralization**  
Human IL-2 Antibody (μg/mL)  
Cell Proliferation Induced by IL-2 and Neutralization by Human IL-2 Antibody. Recombinant Human IL-2 (Catalog # 202-IL) stimulates proliferation in the CTLL-2 mouse cytotoxic T cell line in a dose-dependent manner (orange line). Proliferation elicited by Recombinant Human IL-2 (2 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human IL-2 Monoclonal Antibody (Catalog # MAB202). The ND₅₀ is typically 0.015-0.03 μg/mL.

**Immunocytochemistry**  
IL-2 in Human PBMCs. IL-2 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) treated with calcium ionomycin and PMA using Mouse Anti-Human IL-2 Monoclonal Antibody (Catalog # MAB202) at 8 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

### PREPARATION AND STORAGE

**Reconstitution**  
Reconstitute at 0.5 mg/mL in sterile PBS.

**Shipping**  
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.  
*Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

**Stability & Storage**  
Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  
- 12 months from date of receipt, -20 to -70 °C as supplied.  
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.  
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

### BACKGROUND

Interleukin 2 (IL-2) is a cytokine that stimulates the growth and differentiation of B cells, T cells, NK cells, and monocyte/macrophages. It functions through the heterotrimeric IL-2 receptor comprising α, β, and γ chains.